March 1995 Issue

STI BULLETIN

A publication for users of the NASA scientific and technical information program

RECON Replacement Project Passes Milestone

The RECON Replacement Project recently passed another significant milestone on its way to a new system for its users. On January 17, 1995, the project team completed the acceptance test for BASISplus, the commercial-off-the-shelf software procured as the basic infrastructure for the new system. As a result of the planned test, BASISplus has been formally accepted as the database management text retrieval system on which the new system, RECON plus, will be developed.

The acceptance test phase began earlier this year with the development of an acceptance test plan that included three types of testing—testing for mandatory and secondary requirements using search scripts, stress testing the system with up to 40 simultaneous search sessions, and an evaluation of the ease with which the system can be installed and maintained.

The final RECONplus system environment was duplicated as much as possible. The IBM RS 6000/990 UNIX server used in the acceptance test will be used in the actual system. A BASISplus database was built to preliminary specifications. The acceptance test database included approximately 40,000 bibliographic records for technical reports and 4,000 for contracts.

A team of RECON searchers trained to use the BASISplus search commands tested BASISplus for the mandatory and secondary requirements developed with the input from the NASA user community prior to the procurement. The testing was supported by test scripts prepared in advance by the searchers to test each requirement. Stress testing was performed by executing multiple search sessions automatically. Each search session included a series of 25 actual RECON stored searches that were rewritten into the BASISplus command language.

BASISplus is a database management/text retrieval system that provides standard Boolean search functionality, thesaurus and authority file capabilities, search scripting and various sorting and output options. The development staff at NASA CASI will build multi-platform interfaces to the database using BASIS OpenAPI, an application programmer interface.

With the acceptance test behind them, the RECONplus development staff is modifying the preliminary database design used during the testing. Testing and modifications will continue throughout the remainder of the development phase. Extensive internal testing is planned prior to the release of the system for external testing in the spring of 1995. The NASA user community will be involved in the system interface testing and final acceptance testing of the RECONplus system.

Additional updates will be provided to *STI Bulletin* readers as this important project progresses. Registered users interested in participating in the beta test of the RECONplus system should contact Gail Hodge at the NASA Center for AeroSpace Information at (301) 621-0112 or <ghodge@sti.nasa.gov>.

Surfers Crowd NASA's Cyber Beaches

NASA is making its unclassified, unlimited publications available on the Internet using the World Wide Web (WWW). Over 400,000 abstracts and 600 full-text reports are available to researchers worldwide. More than 31,000 copies of NASA-authored publications have been delivered over the Internet since this new distribution service started in June 1994.

The National Aeronautics and Space Act of 1958 charges NASA to "provide for the widest practicable and appropriate dissemination of information concerning...its activities and the

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In This Issue

National Aeronautics and Space Administration
Scientific and Technical Information Office

Language Barriers Crumble

Recent increases in international cooperation have brought an end to the days in which scientists were limited to the scientific and technical information published in their home countries. The realization of the gains to be made in the international sharing of research advances and technical discoveries has led to exchanges never before thought possible. American aerospace engineers refer to Russian authored texts; materials science researchers in New Jersey correspond with their Japanese counterparts; and propulsion experts examine the research of French scientists. The NASA STI Foreign Literature Translation Service helps eliminate the language barriers that can hinder international cooperation by providing quality translations.

The NASA STI Foreign Literature Translation Service is available to all U.S. government or government contract personnel. Over 34 languages are offered, from commonly requested languages such as Russian and Japanese, to the more uncommon languages of Turkish or Kazakh. Documents may be translated from a foreign language into English, or from English into a foreign language. The translations staff regularly provides translations of the following types of materials, which are just a sample of the types of work provided:

Technical Services

- Technical manuals and briefings
- Articles from foreign journals
- Foreign patents
- International conference proceedings

Non-technical Services

- International meeting agendas and briefings memos and correspondence
- Slide presentations
- Articles from international newspapers

Prices are determined by the type of document, language, number of words, and delivery type (urgent, rush, standard, or economy) requested. After an initial evaluation of a document and a free search for existing translations, the program staff will advise you of your options regarding cost and delivery time.

For a free document evaluation and estimate, documents may be mailed or faxed to NASA CASI. Fax to (301) 621-0134; mail to Foreign Literature Translation Service, 800 Elkridge Landing Road, Linthicum Heights, MD 21090-2934. For an up-to-date cost schedule or for answers to your questions regarding our translation services, call (301) 621-0127 or (301) 621-0129.

Note: Classified documents are not handled.

NASA Access Help Desk Corner

The NASA Access Help Desk provides hotline help with search techniques, telecommunications problems, document requests, and other queries. Here is a typical Help Desk question and answer.

How can I order *NASA Tech Briefs*?

The *NASA Tech Briefs* journal is limited to engineers in U.S. industry and other technology transfer agents. Information on a free subscription to this publication is available by contacting the NASA CASI Technology Transfer Office, 800 Elkridge Landing Road, Linthicum Heights, MD 21090-2934, (301) 621-0245.

How can I access NASA news releases?

NASA news releases can be found on the Internet by using the ftp command to reach <ftp.pao.hq.nasa.gov> (sign in as anonymous). If you want releases to be sent automatically to your e-mail address, send a message to <domo@hq.nasa.gov> and in the text part type the following: subscribe press-release. If you need any further assistance, please contact us at the NASA Access Help Desk.

The ***STI Bulletin***, published every other month, informs NASA STI users about the products, services, and news of the NASA Scientific and Technical Information Office.

For additional information, contact
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Surfers Crowd NASA's Cyber Beaches

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results thereof." The search for innovative methods to distribute NASA's information led a team to create the NASA Technical Report Server (NTRS), which uses the WWW and other Internet-based information systems.

NTRS grew out of work originally done at NASA Langley Research Center and is now an inter-center effort that provides uniform access to various distributed publication servers residing on the Internet. NTRS is comprised of several server sites, some constructed especially for inclusion in NTRS, and others that are existing NASA publication services that NTRS reuses. The server is largely constructed with freely available software running on existing hardware.

The following organizations have abstracts and some full-text reports online:

- Numerical Aerodynamic Simulation Division (NAS) of Ames Research Center
- Dryden Flight Research Center
- Goddard Institute for Space Studies (GISS)
- Institute for Computer Applications in Science and Engineering (ICASE)
- Langley Research Center

Additionally, the following abstract-only services are available:

- Astrophysics Data System (ADS) of the Smithsonian Astrophysical Observatory
- RECONselect Database of the NASA STI Office
- Selected Current Aerospace Notices (SCAN) of the NASA STI Office
- STELAR Project of the Goddard Space Flight Center

Lewis Research Center, Ames Research Center, Goddard Space Flight Center, and the Jet Propulsion Laboratory are expected to join NTRS in early in 1995. Work is also underway for Marshall Space Flight Center and Kennedy Space Center to be included at a later date. All NASA centers and institutes are expected to eventually offer publications via NTRS. Contact Dick Tuey at (202) 358-1395, <dtuey@hqops.hq.nasa.gov> for contacts at various centers and the scheduled production date.

Currently, access is not provided for the entire spectrum of NASA research activities, but work is underway to increase both subject-area breadth and historical depth. Since NTRS is open to researchers worldwide, only documents labeled "unclassified, unlimited" can be offered. NTRS never provides more than what is available through traditional methods to researchers worldwide. The URL for this service is <http:/techreports.larc.nasa.gov/cgi-bin/NTRS>. The e-mail address for questions, suggestions, or comments is Michael L. Nelson, (804) 864-8511 <m.l.nelson@larc.nasa.gov>. A Web browser, such as Netscape or MacWeb, with "forms" support is required to use this service. While some documents are available in HTML, most are presented as compressed PostScript. Due to the highly technical nature of these documents, complete ASCII versions are not possible.

More information is available from the NTRS page, including the Quick Start Guide, a list of Frequently Asked Questions (FAQ), and a feedback form to provide input to the developers of NTRS. The FAQ sheet includes information on interpreting PostScript documents on Macintosh and Windows machines.

NASA Thesaurus Terms

Definitions Added To Existing NASA Thesaurus Terms

Avalanche Diodes

A solid state device that takes advantage of avalanche multiplication of the photocurrent.

Backscattering

Scattering of radiation in a direction having a component opposite its original direction of propagation.

Coherent Light

Light in which the phase relationship between points in a beam remains constant throughout the beam.

You can contact the **NASA Access Help Desk** at (301) 621-0390, fax (301) 621-0134, e-mail at <help@sti.nasa.gov>, or write NASA Access Help Desk, NASA Center for AeroSpace Information, 800 Elkridge Landing Road, Linthicum Heights, MD 21090-2934.

National Aeronautics and
Space Administration
Code JTT
Washington, DC 20546-0001

OFFICIAL BUSINESS
Penalty for Private Use, $300

RECON Training Schedule

Monday, March 6, 1995

Monday, April 3, 1995

Monday, May 8, 1995

Monday, June 5, 1995

RECON users, keep this in mind: when BASISplus is up and running, most users will need additional training.